We claim:

1. A method for inhibiting the proliferation of mammalian cells that express the A_{2B} adenosine receptor comprising administering a therapeutically effective amount of an A_{2B} adenosine receptor antagonist to the mammal.

2. The method of claim 1 wherein the cells that express the A_{2B} adenosine receptor are vascular endothelial cells.

3. The method of claim 2 wherein the vascular endothelial cells that express the A_{2B} adenosine receptor are selected from the group consisting of coronary endothelial cells, endothelial cells from the vascular bed.

4. The method of claim 3 wherein the vascular bed endothelial cells are selected from the group consisting of tumor endothelial cells, retinal endothelial cells, dermal endothelial cells, and brain endothelial cells.

5. The method of claim 1 wherein the endothelial cells are retinal endothelial cells.

6. The method of claim 1 wherein the A_{2B} adenosine receptor antagonist inhibits the expression of vascular endothelial cell growth factor (VEGF).

7. The method of claim 1 wherein the A_{2B} adenosine receptor antagonist is an A_{2B} adenosine receptor antisense oligonucleotide.

8. The method of claim 1 wherein the A_{2B} adenosine receptor antagonist is an A_{2B}-specific ribozyme.

9. The method of claim 1 wherein the A_{2B} adenosine receptor antagonist is a non-selective adenosine receptor antagonist.

10. The method of claim 1 wherein the A_{2B} adenosine receptor antagonist is a selective A_{2B} adenosine receptor antagonist.

11. The method of claim 1 wherein the A_{2B} adenosine receptor antagonist is administered in an amount raging from about 1 microgram/kg to about 50 miligrams/kg.

12. The method of claim 1 wherein the adenosine A_{2B} adenosine receptor antagonist is administered in an amount ranging from about 1 microgram/kg to about 10 miligrams/kg.

13. The method of claim 1 wherein the A_{2B} adenosine receptor antagonist is administered by a method selected from the group consisting of orally, nasally, transdermally,

by bolus, intravenously, in eye drops, by inhalation, and by using micropumps.

14. The method of claim 1 wherein the A_{2B} adenosine receptor agonist is administered in eye drops.

15. The method of claim 1 wherein the mammal is a human.

16. A method for assaying compounds to determine if they are A_{2B} adenosine receptor antagonists or A_{2B} adenosine receptor agonists comprising the steps of:

a. preparing a first and second sample of human retinal endothelial cells;

b. adding a compound to be tested to the first sample of human retinal endothelial cells and allowing the compound to remain in contact with the first sample of human retinal endothelial cells for a defined period of time; and

c. comparing the number of new cells grown in the first sample with the number of new cells grown in the second sample.

17. An A_{2B} adenosine receptor antagonist compound identified by the method of claim 16 wherein the compound caused fewer new cells to grow in the first sample in comparison to the second sample.

18. An A_{2B} adenosine receptor agonist compound identified by the method of claim 16 wherein the compound caused more new cells to grow in the first sample in comparison to the second sample.